
$^{14}\text{C}(\text{p},\text{t}) \quad 1976\text{As01}, 1978\text{Ro08}$

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, J. E. Purcell and C. G. Sheu		NP A968, 71 (2017)	1-Jan-2017

1971Cu01: $^{14}\text{C}(\text{P},\text{t})$ E=14.5 MeV, measured $\sigma(E_t, \theta)$.

1971Ka14: $^{14}\text{C}(\text{P},\text{t})$ E=40,44,50 MeV, analyzed $\sigma(\theta)$.

1973Ho10: $^{14}\text{C}(\text{P},\text{t})$ $E_p=39.8$ MeV, measured $\sigma(E_t, \theta)$. DWBA analysis.

1976As01: $^{14}\text{C}(\text{P},\text{t})$ E=54 MeV, measured $\sigma(\theta)$. ^{12}C deduced IAS, J.

1978Ro08: $^{14}\text{C}(\text{P},\text{t})$ E≈45 MeV, measured σ . Deduced Q. ^{12}C deduced level, T, Γ.

1979Fr04: $^{14}\text{C}(\text{P},\text{t})$ E=42,46 MeV, measured t-charged particle-coin, tn-γ-coin. ^{12}C deduced lowest J=0, T=0 positive parity level, systematics of isospin forbidden decay widths.

1990Ya02: $^{14}\text{C}(\text{P},\text{t})$ E=40.3 MeV, measured $\sigma(\theta)$. ^{12}C levels deduced enhancement factors. DWBA, two-step analyses.

^{12}C Levels

$E(\text{level})^\dagger$	Γ	L	Comments
0			
4.4×10^3			
7.65×10^3			
9.64×10^3			
12.71×10^3			
14.08×10^3			
15.11×10^3			
16.10×10^3			
17.76×10^3			
18.80×10^3			
20.47×10^3			
27595.0	24	<30 keV	$E(\text{level})$: From (1976As01). T=2 $\Gamma_{p0}/\Gamma=0.030$ 22. $\Gamma_{p1}/\Gamma=0.080$ 23. $\Gamma_{p2}/\Gamma=0.0$ 33. $\Gamma_{p3}/\Gamma=0.084$ 32. $\Gamma_{p4+5}/\Gamma=0.08$ 5. $\Gamma_d/\Gamma=0.028$ 20. and $\Gamma_{\alpha 0}/\Gamma = 0.105$ 30. $E(\text{level}), \Gamma$: From (1978Ro08); see also $E_x=27.57$ MeV 3 (1976As01). Partial widths from (1979Fr04).
29.63×10^3	5	<200 keV	T=2 $\Gamma_p/\Gamma=0.8$ 2, $\Gamma_{p0}/\Gamma=0.4$ and $\Gamma_\alpha/\Gamma \approx 0.2$. $E(\text{level})$: From (1976As01).

† From (1990Ya02), except where noted.